

# A CHECK-LIST AND BIBLIOGRAPHY OF HYBRID BIRDS IN NORTH AMERICA NORTH OF MEXICO

BY E. LENDELL COCKRUM

ERNST MAYR (1942:257-270) has discussed in detail some of the philosophical implications of hybridism. He points out, for example, that: "In birds, we have a fair amount of information, since some collectors, sensing their scarcity value, have specialized in the collecting of hybrids, and amateur observers have always been fascinated by them. We can state, on the basis of the data collected by these naturalists, that sympatric hybrids are found primarily in genera in which copulation is not preceded by pair formation and an 'engagement period' [p. 261] . . . Hybrids occur much more rarely among pair-forming species of birds. In such cases the male and female have committed not only an original 'mistake,' but have apparently not 'corrected' it afterwards by abandoning the brood [p. 262]."

In spite of the increased interest in hybridism in birds in recent years, no attempt has been made to compile the many scattered references and reports of hybrids into a single paper since the early compilation by Suchetet (1897). In that classic Suchetet attempted to list all known cases of hybrids in birds. Unfortunately his work is not readily available to most ornithologists in this country.

My attempt to compile known cases of hybrids in birds has been made with three important restrictions: First, I have listed only those cases in which the hybrids presumably resulted from crosses in nature. If hybrids resulting from birds in captivity were listed, the list would be much larger, especially among the ducks and geese (see Ball, 1934:2-4; Sibley, 1938:327-335; Kortright, 1942:43-44; and Delacour and Mayr, 1945:3-55). Second, I have listed only those cases reported from North America north of Mexico. Third, where alternate explanations (intergradation, dimorphism, etc.) have been proposed to account for supposed hybrids, I have made no attempt to evaluate the evidence but, rather, merely report such alternative explanations. Some authors (such as Kortright, 1942:43-44) have discussed hybridism only in a general way and where no specific cases are presented, I have not entered the reference in the check-list.

I wish to emphasize that this check-list and bibliography is certainly incomplete and should be regarded only as a starting point in any bibliographic search. The following sources, among others, yielded clues to the location of the various papers listed in the bibliography: "A Bibliography of Birds" (Strong, 1939-1946); *Zoological Record*; *Biological Abstracts*; and subject indices of *The Auk*, *The Condor*, and for volumes 13-35 and 50-62 inclusive,

of *The Wilson Bulletin*. I have examined the originals of all the papers listed in the bibliography except those preceded by an asterisk (\*).

I acknowledge with thanks the critical aid and suggestions given by Harrison B. Tordoff, of the University of Kansas Museum of Natural History.

CHECK-LIST

*Family Ardeidae. Herons and Bitterns.*

*Ardea occidentalis occidentalis* Audubon × *Ardea herodias wardi* Ridgway.

Great White Heron × Ward's Heron.

*Ardea wurdemanni* Baird, 1858:669.

*Ardea wuerdemanni*, Allen, 1888:195.

*Ardea occidentalis* × *Ardea herodias wardi* = *Ardea wurdemanni*, Holt, 1928:1-35;  
Peters, 1940:105.

*Family Anatidae. Swans, Geese, and Ducks.*

*Branta bernicla nigricans* (Lawrence) × *Branta canadensis hutchinsi* (Richardson). Black Brant × Hutchins Goose.

*Branta nigricans* × *Branta canadensis hutchinsi*, Ransom, 1927:170.

*Branta bernicla hrota* (Muller) × *Chen hyperborea* (Pallas). American Brant × Snow Goose.

Brant × Snow Goose, Brimley, 1927:427.

*Anser albifrons gambelli* (Hartlaub) × *Branta canadensis* (Linnaeus). Tule Goose × Canada Goose.

*Anser albifrons gameli* × *Branta canadensis*, Suchetet, 1897:738.

White-fronted Goose × Canada Goose, Baird, 1873:5.

*Chen caerulescens* (Linnaeus) × *Chen hyperborea hyperborea* (Pallas). Blue Goose × Snow Goose.

*Chen caerulescens* × *Chen hyperborea hyperborea*, Harrold, 1928:290; Sutton, 1931:335-364; Emery, 1945:636; Sibley, 1949:274.

Conspecific—merely examples of dichromatism, Manning, 1942:168-174.

*Anas platyrhynchos* Linnaeus × *Anas rubripes* Brewster. Mallard × Black Duck.

*Anas boschas* × *Anas obscura*, Dutcher, 1889:133; Suchetet, 1897:137, 682; Bigelow, 1907:382-384.

Mallard × Black Duck, Poole, 1929:535.

Mallard × Northern Black Duck, Eaton, 1903:64.

*Anas platyrhynchos* × *Anas rubripes*, Ridgway, 1909:441; Ball, 1934:23.

*Anas platyrhynchos* Linnaeus × *Anas strepera* Linnaeus. Mallard × Gadwall.

*Anas breweri* Audubon, 1840 (iv):252.

*Anas boschas* × *Anas strepera* = *Anas breweri*, Elliot, 1892:162.

*Anas platyrhynchos* Linnaeus × *Anas acuta tzitzihoa* Vieillot. Mallard × Pintail.

*Anas boschas* × *Dafila acuta*, Coues, 1874:54; Elliot, 1892:161; Suchetet, 1897:639; Beyer, 1900:170; Fegler, 1903:303; Bigelow, 1907:383.

Mallard × Pintail, Cross, 1890:162.

*Anas boschas* × *Anas acuta*, Suchetet, 1896:117.

*Anas platyrhynchos* × *Anas acuta*, Ball, 1934:3.

*Anas platyrhynchos platyrhynchos* × *Dafila acuta tzitzihoa*, Gunther, 1941:570.

*Anas platyrhynchos* Linnaeus × *Anas cyanoptera* Vieillot. Mallard × Cinnamon Teal.

Mallard × Cinnamon Teal. Maillard, 1902:46.

*Anas platyrhynchos* Linnaeus × *Anas carolinensis* Gmelin. Mallard × Green-winged Teal.

*Anas boschas* × *Nettion carolinensis*, Stone, 1903:209.

*Anas platyrhynchos* Linnaeus × *Aythya valisineria* (Wilson). Mallard × Canvas-backed Duck.

*Anas boschas* × *Fuligula vallisneria*, Baird, 1847:209.

*Anas platyrhynchos* Linnaeus × *Mareca americana* (Gmelin). Mallard × Baldpate.

*Anas boschas* × *Anas americana*, Elliot, 1892:165; Suchetet, 1896:690.

*Anas boschas* × *Mareca americana*, Bigelow, 1907:386.

*Anas platyrhynchos* × *Mareca americana*, Ball, 1934:3.

*Anas strepera* Linnaeus × *Mareca americana* (Gmelin). Gadwall × Baldpate.

*Anas strepera* × *Anas americana*, Suchetet, 1897:709.

*Mareca penelope* (Linnaeus) × *Mareca americana* (Gmelin). European Widgeon × Baldpate.

*Mareca penelope* × *Mareca americana*, Bailey, 1919:25.

*Anas discors* Linnaeus × *Anas cyanoptera* Vieillot. Blue-winged Teal × Cinnamon Teal.

*Anas discors* × *Anas cyanoptera*, Suchetet, 1897:708.

*Spatula clypeata* (Linnaeus) × *Anas cyanoptera* Vieillot or *Anas discors* Linnaeus. Shoveller × Cinnamon or Blue-winged Teal.

*Spatula clypeata* × *Querquedula cyanoptera* or *Q. discors*, Swarth, 1915:115.

*Spatula clypeata* × *Anas discors*, Suchetet, 1897:708.

Shoveller × Blue-winged Teal, Deane, 1905:321.

*Aix sponsa* (Linnaeus) × *Aythya americana* (Eyton). Wood Duck × Redhead.

*Aix sponsa* × *Fuligula ferina*, Suchetet, 1897:728.

*Aythya americana* (Eyton) × *Anas acuta tzitzihoa* Vieillot. Redhead × Pintail.

Redhead × Pintail, Boardman, 1876:276.

*Fuligula ferina* × *Dajila acuta*, Suchetet, 1897:728.

*Aythya collaris* (Donovan) × *Aythya americana* (Eyton). Ring-necked Duck × Redhead.

*Fuligula affinis* × *Fuligula Valismeria* (or *F. americana*), Elliot, 1859:437.

*Fuligula collaris* × *Fuligula americana*, Newton, 1880:336; Suchetet, 1897:724.

*Fuligula affinis* (or *F. collaris*) × *Fuligula Valismeria* (or *F. americana*), Suchetet, 1897:161.

*Bucephala clangula americana* (Bonaparte) × *Lophodytes cucullatus* (Linnaeus). American Golden-eye × Hooded Merganser.

*Clangula americana* × *Mergus cucullatus* = *Clangula mergiformis*, Cabot, 1854:118; Suchetet, 1896:169.

*Bucephala clangula americana* × *Lophodytes cucullatus*, Ball, 1934:7.

*Somateria mollissima borealis* (Brehm) × *Somateria spectabilis* (Linnaeus). Northern Eider × King Eider.

*Somateria mollissima borealis* × *Somateria spectabilis*, Krabbe, 1926:543.

*Family Accipitriidae. Kites, Hawks and allies.*

*Accipiter gentilis atricapillus* (Wilson) × *Accipiter cooperii* (Bonaparte). Eastern Goshawk × Cooper's Hawk.

*Astur atricapillus* × *Falco Cooperi*, Suchetet, 1897:470.

*Family Tetraonidae. Grouse and Ptarmigans.*

*Lagopus lagopus* (Linnaeus) × *Canachites canadensis* (Linnaeus). Willow Ptarmigan × Spruce Grouse.

*Lagopus lagopus* × *Canachites canadensis* [sic], Hachisuka, 1928:65.

*Lagopus lagopus* × *Canachites canadensis*, Taverner, 1932:89.

*Pedioecetes phasianellus* (Linnaeus) × *Dendragapus obscurus* (Say). Sharp-tailed Grouse × Dusky Grouse.

*Pediaecetes phasianellus columbianus* × *Dendragapus obscurus richadsonii*, Brooks, 1907:167.

*Pediaecetes phasianellus columbianus* × *Dendragapus obscurus richardsoni*, Hachisuka, 1928:65.

*Pedioecetes phasianellus* × *Dendragapus obscurus*, Lincoln, 1950:210-212.

*Pedioecetes phasianellus* (Linnaeus) × *Tympanuchus cupido* (Linnaeus). Sharp-tailed Grouse × Prairie Chicken.

*Pedioecetes phasianellus columbianus* × *Cupidonia cupido* = *Cupidonia cupidini-columbinus*, Brewster, 1877:66.

*Pedioecetes phasianellus* × *Cupidonia cupido*, Gurney, 1884:391.

*Pediocaetes phasianellus campestris* × *Tympanuchus americanus*, Shufeldt, 1893:281.

- Pedioecetes phasianellus* × *Tympanuchus americanus*, Suchetet, 1896:589.  
*Pedioecetes phasianellus campestris* × *Tympanuchus cupido*, Lincoln, 1918:1.  
*Pedioecetes phasianellus* × *Tympanuchus americanus*, Rowan, 1926:336.  
*Pediaecete phasianellus campestris* × *Tympanuchus a. americanus*, Hachisuka, 1928:65.  
*Pedioecetes phasianellus campestris* × *Tympanuchus cupido americanus*, Gross, 1930:97.

*Family Tetraonidae* × *Family Phasianidae*.

*Phasianus colchicus* Linnaeus × *Dendragapus obscurus* (Linnaeus). Ring-necked Pheasant × Dusky Grouse.

*Phasianus torquatus* × *Dendragapus obscurus fuliginosus*, Anthony, 1899:180.

*Phasianus colchicus torquatus* × *Dendragapus obscurus fuliginosus*, Jewett, 1932:191.

*Phasianus colchicus* Linnaeus × *Tympanuchus cupido* (Linnaeus). Ring-necked Pheasant × Prairie Chicken.

*Phasianus colchicus* × *Tympanuchus cupido*, Lincoln, 1950:210.

*Family Phasianidae. Quails and Pheasants.*

*Callipepla squamata* (Vigors) × *Colinus virginianus* (Linnaeus). Scaled Quail × Bobwhite.

*Callipepla squamata* × *Colinus virginianus*, Suchetet, 1897:470.

*Lophortyx californica* (Shaw) × *Colinus virginianus* (Linnaeus). California Quail × Bobwhite.

California Quail × Bobwhite, Aiken, 1930:80.

*Lophortyx californica* (Shaw) × *Lophortyx gambelii* Gambel. California Quail × Gambel's Quail.

*Lophortyx californicus* × *Lophortyx gambeli*, Henshaw, 1885:247.

*Colinus californicus* × *Callipepla gambeli*, Suchetet, 1896:6, 481.

*Lophortyx californica* × *Lophortyx gambeli*, Hachisuka, 1928:84.

*Lophortyx californica* (Shaw) × *Oreortyx picta* (Douglas). California Quail × Plumed Quail.

*Lophortyx californicus californicus* × *Oreortyx pictus plumiferous*, Peck, 1911:149.

*Lophortyx californicus* × *Oreortyx* sp., Bailey, 1928:210.

*Lophortyx californica* × *Oreortyx picta*, Hachisuka, 1928:83.

*Lophortyx gambelii* Gambel × *Callipepla squamata pallida* Brewster. Gambel's Quail × Scaled Quail.

Gambel's Quail × Scaled Quail, Bailey, 1928:210.

*Lophortyx gambeli* × *Gallipipla* [sic] *squamata*, Hachisuka, 1928:84.

*Family Laridae. Gulls and Terns.*

*Larus leucopterus kumlieni* Brewster. Kumlien's Gull.

*Larus kumlieni* Brewster, Bent, 1921:74; Taverner, 1933:88; Sutton, 1931:158; Gross, 1937:30.

*Larus leucopterus kumlieni*, Bishop, 1944:186.

*Larus leucopterus* × *Larus argentatus thayeri* = *Larus kumlieni*, Dwight, 1925:250.

*Larus hyperboreus* Gummerus × *Larus argentatus vegae* Palmén. Glaucous Gull × Vega Gull.

*Larus nelsoni*, Henshaw, Bent, 1921:76.

*Larus hyperboreus* × *Larus argentatus vegae* = *Larus nelsoni*, Dwight, 1925:250.

*Family Trochilidae. Hummingbirds.*

*Calypte costae* (Bourcier) × *Selasphorus platycercus* (Swainson). Costa's Hummingbird × Broad-tailed Hummingbird.

*Calypte costae* × *Selasphorus platycercus*, Huey, 1944:636.

*Calypte costae* (Bourcier) × *Archilochus alexandri* (Bourcier and Mulsant). Costa's Hummingbird × Black-chinned Hummingbird.

*Calypte costae* × *Trochilus alexandri*, Thayer and Bangs, 1907:313; Taylor, 1909:293.

*Amazilia violiceps ellioti* (Berlepsch) × *Cyananthus latirostris magicus* (Mulsant and Verreaux). Violet-crowned Hummingbird × Broad-billed Hummingbird.

*Cyanomyia salvini* Brewster, 1893:214.

*Uranomita salvini*, Bishop, 1906:337.

*Amazilia violiceps conjuncta* × *Cyananthus latirostris* = *Amazilia salvini*, Griscom, 1934:378.

*Calypte anna* (Lesson) × *Archilochus alexandri* (Bourcier and Mulsant). Anna's Hummingbird × Black-chinned Hummingbird.

*Trochilus violajugulum* Jeffries, 1888:168.

*Calypte anna* × *Trochilus alexandri* = *Trochilus violajugulum*, Thayer and Bangs, 1907:313.

*Calypte anna* × *Trochilus alexandri*, Taylor, 1909:293.

*Calypte anna* × *Archilochus alexandri* = *Archilochus violajugulum*, Grinnell and Miller, 1944:569.

*Selasphorus rufus* (Gmelin) × *Stellula calliope* (Gould). Rufus Hummingbird × Calliope Hummingbird.

*Selasphorus rufus* × *Stellula calliope*, Thayer and Bangs, 1907:312; Taylor, 1909:293.

*Selasphorus sasin sasin* Lesson × *Calypte anna* (Lesson). Allen's Hummingbird × Anna's Hummingbird.

*Selasphorus floresii* Gould, Emerson, 1901:68; Grinnell and Miller, 1944:569.

*Selasphorus alleni* × *Calypte anna*, Thayer and Bangs, 1907:313; Taylor, 1909:291; Grinnell and Miller, 1944:569.

*Family Picidae. Woodpeckers.*

*Colaptes auratus* (Linnaeus) × *Colaptes cafer* (Gmelin). Yellow-shafted Flicker × Red-shafted Flicker.

*Colaptes ayresi* Audubon, 1843.

*Colaptes hybridus* Baird, 1858.

*Colaptes auratus* × *Colaptes cafer* = *Colaptes hybridus*, Elliot, 1892:161.

*Colaptes auratus* × *Colaptes cafer*. Allen, 1892:21; Rhoads, 1892:325; Eaton, 1893:25; Suchetet, 1897:840; Ridgway, 1909:441; Chapman, 1924:26; Taverner, 1934:34; Deakin, 1936:585; Graber and Graber, 1951:145; Bent, 1939:290; Alexander, 1938:27.

*Colaptes auratus luteus* [sic] × *Colaptes cafer collaris*, Baldwin, 1910:340.

*Colaptes auratus luteus* × *Colaptes cafer collaris*, Bent, 1908:26; Wood, 1923:49.

*Colaptes auratus* × *Colaptes mexicanus*, Suchetet, 1896:429.

*Colaptes chrysoides mearnsi* Ridgway × *Colaptes cafer collaris* Vigors.  
Gilded Flicker × Red-shafted Flicker.

*Colaptes chrysoides* × *Colaptes mexicanus*, Brewster, 1883:25; Suchetet, 1896:435.

*Colaptes chrysoides* × *Colaptes collaris*, Swarth, 1905:27.

Gilded × Red-shafted Flicker, Brenninger, 1898:13.

*Colaptes chrysoides mearnsi* (not hybrids but color dimorphism), Grinnell, 1914:137; Bent, 1939:304.

*Dendrocopos nuttalli* (Gambel) × *Dendrocopos pubescens* (Linnaeus). Nuttall's Woodpecker × Downy Woodpecker.

*Dryobates nuttalli* × *Dryobates pubescens gairdnerii*. Ridgway, 1887:521; Suchetet, 1896:437.

#### Family Hirundinidae. Swallows.

*Hirundo rustica erythrogaster* Boddaert × *Petrochelidon pyrrhonata* (Vieillot). Barn Swallow × Cliff Swallow.

*Hirundo horreori-lunifrons* Trotter, 1878:135.

*Hirundo horreorum* × *Petrochelidon lunifrons*, Trotter, 1878:135; Trotter, 1887:309.

*Hirundo erythrogaster* var. *horreorum* × *Petrochelidon lunifrons*, Suchetet, 1896:291.

*Hirundo erythrogaster* × *Petrochelidon lunifrons*, Mearns, 1902:73.

*Petrochelidon pyrrhonota* (Vieillot) × *Iridoprocne bicolor* (Vieillot). Cliff Swallow × Tree Swallow.

*Petrochelidon lunifrons* × *Tachycineta bicolor*, Chapman, 1902:392.

#### Family Paridae. Titnics, Verdins, and Bush-tits.

*Parus atricapillus* Linnaeus × *Parus carolinensis* Audubon. Black-capped Chickadee × Carolina Chickadee.

Black-capped Chickadee × Carolina Chickadee, Chapman, 1924:27.

*Parus atricapillus* Linnaeus × *Parus gambeli* Ridgway. Black-capped Chickadee × Mountain Chickadee.

*Parus atricapillus* × *Parus Gambelli*, Suchetet, 1897:300.

*Parus bicolor* Linnaeus × *Parus atricapillus* Linnaeus. Tufted Titmouse × Black-capped Chickadee.

*Lophophanes bicolor* × *Parus atricapillus*, Ridgway, 1876:169.

*Parus bicolor* × *Parus atricapillus*, Suchetet, 1897:301.

*Parus bicolor* Linnaeus × *Parus atricristatus* Cassin. Tufted Titmouse × Black-crested Titmouse.

*Parus atricristatus castaueifrons* Sennett, 1887:28.

*Parus bicolor texensis* Sennett, 1887:29.

*Baeolophus bicolor* × *Baeolophus atricristatus*, Allen, 1907:468.

*Baeolophus bicolor* × *Baeolophus atricristatus* Sennetti, Ridgway, 1904:386.

Family *Sylviidae*. Warblers, Gnatcatchers, and Kinglets.

*Regulus calendula* (Linnaeus) × *Regulus satrapa* Lichtenstein. Ruby-crowned Kinglet × Golden-crowned Kinglet.

*Regulus cuvieri* Audubon, 1832:288.

*Regulus calendula* × *Regulus satrapa*, Brewster, 1881:225; Suchetet, 1896:375.

Known only from Audubon's description and figure of the original specimen, killed in June, 1812, on the banks of the Schuylkill River, in Pennsylvania.

Family *Parulidae*. Wood Warblers.

*Vermivora chrysoptera* (Linnaeus) × *Vermivora pinus* (Linnaeus). Golden-winged Warbler × Blue-winged Warbler.

*Helminthophaga leucobronchialis* Brewster, 1876:1.

*Helminthophila leucobronchialis*, Ridgway, 1882:53; Ridgway, 1885:359; Thurber, 1886:411; Trotter, 1887:307; Richmond, 1895:307; Bishop, 1901:21; Ridgway, 1902:453; Bishop, 1905:24.

*Vermivora leucobrauchialis*, Sutton, 1928:206; Watterson, 1928:511; Broun, 1929:214; Cramer, 1931:434; Walkinshaw, 1931:613; Cramer, 1932:355; Campbell, 1934:526; Broun, 1935:320; Olsen, 1935:100; White, 1936:450; Pitelka, 1938:540; Pitelka, 1939:340; Seibert, 1941:410.

Brewster's Warbler, Carter and Howland, 1923:423; Hicks, 1935:168.

*Helminthophaga lawrencei* Herrick, 1874:220.

*Helminthophila lawrenceii*, Osgood, 1907:342; Ridgway, 1902:452.

*Helminthophila lawrencei*, Beebe, 1904:387.

*Vermivora lawrencei*, Tucker, 1928:102; Broun, 1929:213; Brown, 1934:242; Campbell, 1934:526; Meanley, 1944:477.

Lawrence's Warbler, Trotter, 1887:307; Nichols, 1908:86; Roland, 1928:510; Hicks, 1929:43; Hicks, 1935:168.

*Helminthophila lawrencei* × *Helminthophila pinus*, Brewster, 1886:411; Ridgway, 1876:169; Ridgway, 1882:53.

*Helminthophila chrysoptera* × *Helminthophila pinus*, Fisher, 1885:378; Sage, 1889:279; Suchetet, 1896:319; Bishop, 1905:24; Mccker, 1906:104; Nichols, 1908:86; Ridgway, 1909:441; Faxon, 1911:57; Faxon, 1913:311.

*Vermivora chrysoptera* × *Vermivora pinus*, Moore, 1916:202; Morss, 1926:384; Richardson, 1928:46; Pitelka, 1939:340; Carter, 1944:48; Parkes, 1949:48; Parkes, 1951:5.

Blue-winged × Golden-winged Warbler, Alexander, 1919:579.

*Vermivora pinus* (Linnaeus) × *Oporornis formosus* (Wilson). Blue winged Warbler × Kentucky Warbler.

*Helmiuthophaga cincinnatiensis* Langdon, 1880:119.



*Helminthophaga pinus* × *Oporornis formosa* = *Helminthophaga cincinnatiensis*, Ridgway, 1880:237; Suchetet, 1896:345; Ridgway, 1902:446.

*Vermivora pinus* × *Oporornis formosus*, McCamey, 1950:67.

*Vermivora pinus* (Linnaeus) × *Oporornis philadelphia* (Wilson). Blue-winged Warbler × Mourning Warbler.

*Vermivora pinus* × *Oporornis philadelphia*, McCamey, 1950:67.

*Parula americana* (Linnaeus) × *Setophaga ruticilla* (Linnaeus). Parula Warbler × American Redstart.

*Compsothlypis americana* × *Setophaga ruticilla*, Sutton, 1942:153; Burleigh, 1944:292.

*Dendroica coronata* (Linnaeus) × *Dendroica auduboni* (Townsend). Myrtle Warbler × Audubon's Warbler.

*Dendroica coronata* × *Dendroica auduboni*, Taylor, 1911:173; Brodkorb, 1934:243; Mailliard, 1937:223; Monson and Phillips, 1941:108; Packard, 1945:623; Alexander, 1945:623; Tordoff, 1950:80; Graber and Graber, 1951:146.

*Dendroica occidentalis* (Townsend) × *Dendroica townsendi* (Townsend). Hermit Warbler × Townsend Warbler.

*Dendroica occidentalis* × *Dendroica townsendi*, Jewett, 1944:23.

*Dendroica dominica* (Linnaeus) × *Parula americana* (Linnaeus). Yellow-throated Warbler × Parula Warbler.

*Dendroica potomac* Haller, 1940:49.

*Dendroica dominica* × *Compsothlypis americana*, Sutton, 1942:151.

*Dendroica striata* (Forster) × *Dendroica castanea* (Wilson). Black-poll Warbler × Bay-breasted Warbler.

*Dendroica striata* × *Dendroica castanea*, Brodkorb, 1934:243.

*Dendroica striata* (Forster) × *Dendroica tigrina* (Gmelin). Black-poll Warbler × Cape May Warbler.

*Sylvia carbonata* Audubon, 1831:308.

*Dendroica carbonata*, Ridgway, 1902:540.

*Dendroica striata* × *Periglossa tigrina*, Brewster, 1881:225; Suchetet, 1896:347.

*Dendroica carbonata* × *Dendroica tigrina*, Coues, 1927:332.

Known only from Audubon's plate and description of two specimens killed near Henderson, Kentucky, in May, 1811.

*Family Icteridae. Meadowlarks, Blackbirds, and Troupials.*

*Sturnella magna* (Linnaeus) × *Sturnella neglecta* Audubon. Eastern Meadowlark × Western Meadowlark.

*Sturnella magna* × *Sturnella neglecta*, Chapman, 1924:25.

*Sturnella magna magna* × *Sturnella magna neglecta*, Chapman, 1900:297-320.

*Icterus galbula* (Linnaeus) × *Icterus bullockii* (Swainson). Baltimore Oriole × Bullock's Oriole.

*Icterus galbula* × *Icterus bullockii*. Bent. 1908:29; Sutton. 1942:79; Beecher, 1950:77; Graber. 1951:146.

*Icterus galbula* × *Icterus bullocki*. Sutton. 1938:1.

*Quiscalus quiscalula* (Linnaeus) × *Quiscalus versicolor* Vieillot. Purple Grackle × Bronzed Grackle.

*Quiscalus quiscula aeneus* × *Quiscalus quiscula stonei*, the hybrid population called *Quiscalus quiscula ridgwayi*, Chapman, 1936:405; Mayr, 1942:265.

*Quiscalus quiscula* × *Quiscalus aeneus*, Chapman, 1892:1-20; Allen, 1904:467.

Purple Grackle × Bronzed Grackle. Chapman, 1924:26.

*Family Thraupidae. Tanagers.*

*Piranga olivacea* (Gmelin) × *Piranga ludoviciana* (Wilson). Scarlet Tanager × Western Tanager.

*Piranga olivacea* × *Piranga ludoviciana*, Tordoff, 1950:3.

*Piranga olivacea* (Gmelin) × *Piranga rubra* (Linnaeus). Scarlet Tanager × Summer Tanager.

*Piranga erythromelas* × *Piranga rubra*, Suchetet, 1897:775; McCormick, 1898:302.

*Family Fringillidae. Grosbeaks, Finches, Sparrows, and Buntings.*

*Pheucticus ludovicianus* (Linnaeus) × *Pheucticus melanocephalus* (Swainson). Rose-breasted Grosbeak × Black-headed Grosbeak.

*Hedymeles ludovicianus* × *Hedymeles melancephalus papago*, Swenk. 1930:289; Hudson, 1933:32; Swain, 1933:63; Swenk, 1936:27.

*Pheucticus ludovicianus* × *Pheucticus melanocephalus*, Graber and Graber, 1951:146.

*Passerina cyanea* (Linnaeus) × *Passerina amoena* (Say). Indigo Bunting × Lazuli Bunting.

*Passerina cyanea* × *Passerina amoena*, Breckenridge. 1930:39; Sutton. 1938:5; Beecher, 1950:77; Graber and Graber, 1951:146.

*Spiza americana* (Gmelin) × *Guiraca caerulea* (Linnaeus). Dickcissel × Blue Grosbeak.

*Emberiza townsendii* Audubon, 1834:183.

*Spiza americana* × *Guiraca caerulea*, Coues, 1927:447.

The original specimen, taken May 11, 1833. in Chester County, Pennsylvania, remains unique.

*Pinicola enucleator leucura* (Müller) × *Carpodacus purpureus* (Gmelin). Pine Grosbeak × Purple Finch.

*Pinicola enucleator* × *Carpodacus purpureus*, Cross. 1890; Thompson, 1894:1, Suchetet, 1897:267, 768.

*Acanthis flamma* (Linnaeus) × *Acanthis hornemanni exilipes* (Coues). Common Redpoll × Hoary Redpoll.

*Acanthis linaria* × *Acanthis exilipes*, Suchetet, 1897:247.

*Acanthis flammea* (Linnaeus) × *Spinus pinus* (Wilson). Redpoll × Pine Siskin.

*Aegiothus flavirostris* var. *brewsterii* Ridgway, 1872:433.

*Acanthis brewsterii*, Ridgway, 1885:354.

*Acanthis linaria* × *Spinus pinus*, Brewster, 1881:225; Suchetet, 1896:246; Coues, 1927:391.

*Junco aikenii* Ridgway × *Junco oreganus* (Townsend). White-winged Junco × Oregon Junco.

*Junco aikenii* × *Junco oreganus mearnsi*, Miller, 1941:425.

*Junco aikenii* × *Junco oreganus*, Miller, 1949:341.

*Junco hyemalis* (Linnaeus) × *Junco oreganus* (Townsend). Slate-colored Junco × Oregon Junco.

*Junco hyemalis cismontanus* × *Junco oreganus montanus*, Miller, 1941:425.

*Junco hyemalis* × *Junco oreganus*, Dwight, 1918:295; Monson and Phillips, 1941:110.

*Junco caniceps caniceps* (Woodhouse) × *Junco caniceps dorsalis* Henry. Gray-headed Junco × Red-backed Junco.

*Junco caniceps caniceps* × *Junco caniceps dorsalis*, Miller, 1941:412.

*Junco caniceps caniceps* × *Junco oreganus dorsalis*, Miller, 1939:211.

*Junco caniceps* × *Junco phaeonotus* = *Junco dorsalis*, Dwight, 1918:300.

*Junco caniceps* (Woodhouse) × *Junco oreganus* (Townsend). Gray-headed Junco × Oregon Junco.

*Junco oreganus mutabilis* Van Rossem, 1931:325.

*Junco caniceps caniceps* × *Junco oreganus thurberi*, Miller, 1939:211; Miller, 1941:412.

*Junco caniceps caniceps* × *Junco oreganus mearnsi*, Miller, 1941:412.

*Junco caniceps dorsalis* × *Junco oreganus pinosus*, Miller, 1938:92.

*Junco caniceps* × *Junco mearnsi*, Van Tyne and Sutton, 1937:110; Monson and Phillips, 1941:110.

*Junco caniceps caniceps* × *Junco mearnsi*, Miller, 1939:211.

*Junco caniceps* × *Junco thurberi* = *Junco oreganus mutabilis*, Monson and Phillips, 1941:111.

*Spizella pallida* (Swainson) × *Spizella breweri* Cassin. Clay-colored Sparrow × Brewer's Sparrow.

*Spizella pallida* × *Spizella pallida* var. *Breweri*, Suchetet, 1897:274.

*Zonotrichia coronata* (Pallas) × *Zonotrichia leucophrys* (Forster). Golden-crowned Sparrow × White-crowned Sparrow.

*Zonotrichia coronata* × *Zonotrichia leucophrys*, Miller, 1940:45.

*Zonotrichia albicollis* (Gmelin) × *Junco hyemalis* (Linnaeus). White-throated Sparrow × Slate-colored Junco.

*Zonotrichia albicollis* × *Junco hyemalis*, Townsend, 1883:78, Stone, 1893:213; Suchetet, 1897:272, 769.

BIBLIOGRAPHY

- AIKEN, C. E. H.  
1930 A Bobwhite  $\times$  California Quail hybrid. *Auk*, 47:80-81.
- ALEXANDER, E. G.  
1919 Hybrid warbler in Missouri. *Auk*, 36:579.
- ALEXANDER, G.  
1938 Observations on hybrid flickers in Colorado. *Jour. Colorado-Wyoming Acad. Sci.*, 2:27.  
1945 Natural hybrids between *Dendroica coronata* and *D. auduboni*. *Auk*, 62:623-626.
- ALLEN, J. A.  
1888 Ridgway on Wuerdemann's Heron. *Auk*, 5:195.  
1892 The North American species of the genus *Colaptes*, etc. *Bull. Amer. Mus. Nat. Hist.*, 4:21-44.  
1907 The *Baeolophus bicolor-atricristatus* group. *Bull. Amer. Mus. Nat. Hist.*, 23:467-481.
- ANTHONY, A. W.  
1899 Hybrid Grouse. *Auk*, 16:180-181.
- AUDUBON, J. J.  
\*1831-39 Ornithological biography. Adam Black, Edinburgh, 5 volumes.  
\*1840-44 The birds of America. William Street, Philadelphia, 7 volumes, volume VII in 1943.
- BAILEY, H. H.  
1919 An interesting hybrid of *Mareca penelope* (Widgeon) and *Mareca americana* (Baldpate). *Wilson Bull.*, 31:25.
- BAILEY, V.  
1928 A hybrid Scaled  $\times$  Gambel's Quail from New Mexico. *Auk*:45:210.
- BAIRD, S. F.  
1847 [Notice of a hybrid between the Canvas Back Duck (*Fuligula vallisneria*) and the Common Duck (*Anas boschas*).] *Proc. Acad. Nat. Sci., Philadelphia*, 3:209.  
1858 U. S. Pacific Railroad Surveys. Report of exploration and surveys, . . . for a railroad from the Mississippi River to the Pacific Ocean. Vol. 9, part II, Birds. Pp. xv + 1005, Washington, D. C.  
\*1873 [Note on hybrid goose.] *Forest and Stream*, 2:5.
- BALDWIN, R. M.  
1910 A hybrid flicker in eastern Missouri. *Auk*, 27:340-341.
- BALL, S. C.  
1934 Hybrid ducks, including descriptions of two crosses of *Bucephala* and *Lophodytes*. *Bull. Peabody Mus. Nat. Hist.*, 3:1-26, 3 pls.
- BEEBE, C. W.  
1904 Breeding of Lawrence Warbler in New York City. *Auk*, 21:387-388.
- BEECHER, W. J.  
1950 Convergent evolution in the American orioles. *Wilson Bull.*, 62:50-86, 1 pl., 10 figs.
- BENT, A. C.  
1908 Summer birds of southwestern Saskatchewan. *Auk*, 25:25-35.

- 1921 Life histories of North American gulls and terns. *U. S. Natl. Mus. Bull.*, 113:  
x + 340, 93 pls.
- 1939 Life histories of North American woodpeckers. *U. S. Natl. Mus. Bull.*, 174:viii  
+ 334, 39 pls.
- BEYER, G. E.  
1900 An interesting hybrid. *Auk*, 17:170-171.
- BIGELOW, H. B.  
1907 On hybrids between the Mallard (*Anas boschas*) and certain other ducks.  
*Auk*, 24:382-388.
- BISHOP, L. B.  
1905 The status of *Helminthophila leucobronchialis* and *Helminthophila lawrencei*.  
*Auk*, 22:21-24.  
1906 *Uranomitra salvini* in Arizona. *Auk*, 23:337-338.  
1944 Ornithological notes from Point Barrow, Alaska. *Field Mus. Nat. Hist., Zool.  
Ser.*, 29:181-190.
- BRECKENRIDGE, W. J.  
1930 A hybrid *Passerina* (*Passerina cyanea* + *Passerina amoena*). *Univ. Minnesota  
Mus. Nat. Hist., Occas. Papers*, 3:39-40, 1 pl.
- BRENNINGER, G. F.  
1898 Hybridization of flickers. *Osprey*, 3:13.
- BREWSTER, W.  
1876 Description of a new species of *Helminthophaga*. *Bull. Nutt. Orn. Club*, 1:1-2,  
1 pl.  
1877 An undescribed hybrid between two North American grouse. *Bull. Nutt. Orn.  
Club*, 2:66-68.  
1881 On the relationship of *Helminthophaga leucobronchialis*. Brewster, and *Hel-  
minthophaga lawrencei*, Herrick; with some conjectures respecting certain  
other North American birds. *Bull. Nutt. Orn. Club*, 6:218-225.  
1883 On a collection of birds lately made by Mr. F. Stephens in Arizona. *Bull. Nutt.  
Orn. Club*, 8:21-36.  
1886 An interesting specimen of *Helminthophila*. *Auk*, 3:411-412.  
1893 Description of a new Hummingbird from northern Mexico. *Auk*, 10:214-215.
- BRIMLEY, H. H.  
1927 Rare birds in North Carolina. *Auk*, 44:427-428.
- BRODKORB, P.  
1934 A hybrid in the genus *Dendroica*. *Auk*, 51:243.
- BROOKS, A.  
1907 A hybrid grouse, Richardson's + Sharp-tail. *Auk*, 24:167-169. 1 pl.
- BROUN, M.  
1929 in E. H. Forbush, *Birds of Massachusetts*. Massachusetts Department of Agri-  
culture, Vol. II, pp. xlvi + 466, plates.  
1935 Notes on some unusual birds in Florida. *Auk*, 52:320-321.
- BROWN, J. W.  
1934 Lawrence's warbler in Delaware. *Auk*, 51:242-243.
- BURLEIGH, T. D.  
1944 Description of a new hybrid warbler. *Auk*, 61:291-293.
- CABOT, S.  
\*1854 Wild hybrid duck, *Clangula americana* and *Mergus cucullatus*. *Abstract Proc.*

*Boston Soc. Nat. Hist.*, 5:118-120.

CAMPBELL, L. W., AND CAMPBELL, B. R.

1934 Lawrence's Warbler taken near Toledo, Ohio. *Auk*, 51:526.

CARTER, T. D.

1944 Six years with a Brewster's Warbler. *Auk*, 61:48-61, 3 pls.

CARTER, T. D. AND HOWLAND, R. H.

1923 A Brewster's Warbler and his brood. *Auk*, 40:423-430, 1 pl.

CHAPMAN, F. M.

1892 A preliminary study of the grackles of the subgenus *Quiscalus*. *Bull. Amer. Mus. Nat. Hist.*, 4:1-20, 1 map.

1900 A study of the genus *Sturnella*. *Bull. Amer. Mus. Nat. Hist.*, 22:297-320.

1902 A hybrid between the Cliff and Tree Swallows. *Auk*, 19:392-394.

1924 Criteria for the determination of subspecies in systematic ornithology. *Auk*, 41:17-29.

1936 Further remarks on *Quiscalus* with a report on additional specimens from Louisiana. *Auk*, 53:405-417, 2 maps.

COUES, E. B.

\*1874 Hybrid ducks. *Forest and Stream*, 2:54, 78-103.

1927 Key to North American birds. The Page Co., Boston, 6th ed., 2 volumes.

CRAMER, W. S.

1931 Brewster's Warbler at Lancaster, Pa. *Auk*, 48:434.

1932 Another record of Brewster's Warbler in Lancaster County, Pa. *Auk*, 49:355.

CROSS, W.

1890 [Hybrid between a Pintail and a Mallard.] *Ottawa Nat.*, 4:162-163.

\*1890 [Description of a hybrid *Pinicola enucleator* × *Carpodacus purpureus*.] *Trans. Canadian Inst., Second meeting*, 28 Jan., 1890.

DEAKIN, A.

1936 Natural hybridization and genetics of Flickers (*Colaptes*). *Amer. Nat.*, 70:585-590.

DEANE, R.

1905 Hybridism between the Shoveller and Blue-winged Teal. *Auk*, 22:321.

DELACOUR, J., AND MAYR, E.

1945 The family Anatidae. *Wilson Bull.*, 57:3-55, 7 pls., 24 figs.

DUTCHER, W.

1889 Bird notes from Long Island, New York. *Auk*, 6:131-139.

DWIGHT, J., JR.

1918 The geographical distribution of color and of other variable characters in the genus *Junco*: a new aspect of specific and subspecific values. *Bull. Amer. Mus. Nat. Hist.*, 38:269-309, 3 pls., 5 maps.

1925 The gulls (*Laridae*) of the world; their plumages, moults, variations, relationships and distribution. *Bull. Amer. Mus. Nat. Hist.*, 52:63-401, 5 pls., 384 figs.

EATON, A. A.

1893 Hybridism in the genus *Colaptes*. *Science*, 21:25.

EATON, E. H.

1903 A hybrid duck. *Auk*, 20:64.

ELLIOT, D. G.

\*1859 [On a hybrid duck.] *Proc. Zool. Soc. London*, 1859:437.

- 1892 Hybridism, and a description of a hybrid between *Anas boschas* and *Anas americana*. *Auk*, 9:160-166.
- EMERSON, W. O.  
1901 Capture of a Floresi's Hummingbird at Haywards, Cal. *Condor*, 3:68.
- EMERY, D.  
1945 Hybrid between Snow and Blue Goose in Washington, D. C. *Auk*, 62:636-637.
- FAXON, W.  
1911 Brewster's Warbler. *Mem. Mus. Comp. Zool.*, 40:57-78, 1 pl.  
1913 Brewster's Warbler (*Helminthophila leucobronchialis*) a hybrid between the Golden-winged Warbler (*Helminthophila chrysoptera*) and the Blue-winged Warbler (*Helminthophila pinus*). *Mem. Mus. Comp. Zool.*, 40:311-316, 1 pl.
- FELGER, A. H.  
1903 Hybrid duck—Mallard (*Anas boschas*) + Pintail (*Dafila acuta*). *Auk*, 20:303-304.
- FISHER, A. K.  
1885 Evidence concerning the interbreeding of *Helminthophila chrysoptera* and *H. pinus*. *Auk*, 2:378-379.
- GRABER, R. AND GRABER, J.  
1951 Notes on the birds of southwestern Kansas. *Trans. Kansas Acad. Sci.*, 54:145-174.
- GRINNELL, J.  
1914 An account of the mammals and birds of the lower Colorado Valley with especial reference to the distributional problems presented. *Univ. California Publ. Zool.*, 12:51-294.
- GRINNELL, J. AND MILLER, A. H.  
1944 The distribution of the birds of California. *Pacific Coast Avifauna*, 27:1-608, 1 pl., 57 figs.
- GRISCOM, L.  
1934 The ornithology of Guerrero, Mexico. *Bull. Mus. Comp. Zool.*, 75 (10):378.
- GROSS, A. O.  
1930 Progress report of the Wisconsin Prairie Chicken investigation. *Wisconsin Conservation Comm.*, 1930:1-112.  
1937 Birds of the Bowdoin-Macmillan Arctic expedition. *Auk*, 54:12-42, 4 pls.
- GUNTHER, G.  
1941 A Mallard-Pintail Hybrid. *Auk*, 58:570.
- GURNEY, J. H.  
1884 Hybrids between *Pediocetes phasianellus* and *Cupidonia cupido*. *Auk*, 1:391-392.
- HACHISUKA, M.  
1928 Variations among birds (chiefly game birds). *Ornithological Society of Japan, Supplementary Publ.*, 12:x + 85, 4 colored pls., 20 black and white pls.
- HALLER, K. W.  
1940 A new wood warbler from West Virginia. *Cardinal*, 5:49-53, 1 pl.
- HARROLD, C. G.  
1928 Notes on the Lesser Snow and Blue Geese observed at Whitewater Lake, Manitoba. *Auk*, 45:290-292.
- HENSHAW, H. W.  
1885 Hybrid quail (*Lophortyx gambeli* × *L. californicus*). *Auk*, 2:247-249.

HICKS, L. E.

1929 Some interesting Ohio records. *Wilson Bull.*, 41:43-44.

1935 Distribution of the breeding birds of Ohio. *Ohio Biol. Surv. Bull.*, 32:124-190.

HOLT, E. G.

1928 The status of the Great White Heron (*Ardea occidentalis* Audubon) and Wurdemann's Heron (*Ardea wurdemannii* Baird). *Sci. Publ. Cleveland Mus. Nat. Hist.*, 1:1-35.

HUDSON, G. E.

1933 Hybridism between the Rose-breasted and Rocky Mountain Black-headed Grosbeaks in Nebraska. *Nebraska Bird Review*, 1:32-33.

HUEY, L. M.

1944 A hybrid Costa's  $\times$  Broad-tailed Hummingbird. *Auk*, 61:636-637.

JEFFRIES, J. A.

1888 A description of an apparently new species of *Trochilus* from California. *Auk*, 5:168-169.

JEWETT, S. G.

1932 An unusual Gallinaceous hybrid. *Condor*, 34:191.

1944 Hybridization of Hermit and Townsend Warblers. *Condor*, 46:23-24.

KORTRIGHT, F. H.

1942 The ducks, geese and swans of North America. American Wildlife Institute, Washington, D. C., pp. viii + 476, 36 pls.

KRABBE, T. N.

1926 To formodede bastarder mellem de to grønlandske ederfuglearter. [Two supposed hybrids between the two Greenland species of Eider] *Vidensk. Meddel. Dansk Naturlist. For. Kobenhavn*, 80:543-555, 3 pls.

LANGDON, F. W.

1880 Description of a new warbler of the genus *Helminthophaga*. *Jour. Cincinnati Soc. Nat. Hist.*, 1880:118-119.

LINCOLN, F. C.

1918 A strange case of hybridism. *Wilson Bull.*, 30:1-2, 1 pl.

1950 A Ring-necked Pheasant  $\times$  Prairie Chicken hybrid. *Wilson Bull.*, 62:210-212, 1 pl.

MAILLARD, J.

1902 Additions to the list of Paicines birds. *Condor*, 4:46.

MAILLIARD, J.

1937 Hybridism between Myrtle and Audubon Warblers. *Condor*, 39:223-225.

MANNING, T. H.

1942 Blue and Lesser Snow Geese on Southampton and Baffin Islands. *Auk*, 59:158-175, 1 pl., 1 map.

MAYR, E.

1942 Systematics and the origin of species. Columbia Univ. Press, pp. xiv + 334.

McCAMEY, F.

1950 A puzzling hybrid warbler from Michigan. *Jack-Pine Warbler*, 28:67-72, 1 pl.

McCORMICK, L. M.

1893 A hybrid tanager. *Auk*, 10:302-303.

MEANLEY, B.

1944 Lawrence's Warbler in Maryland. *Auk*, 61:477.

MEARNS, E. A.

1902 Description of a hybrid between the Barn and Cliff Swallows. *Auk*, 19:73-74.



- MEEKER, J. C. A.  
1906 A male Golden-winged Warbler (*Helminthophila chrysoptera*) mated with a female Blue-winged Warbler (*Helminthophila pinus*) at Bethel, Conn. *Auk*, 23:104.
- MILLER, A. H.  
1938 Hybridization of juncos in captivity. *Condor*, 40:92-93.  
1939 Analysis of some hybrid populations of juncos. *Condor*, 41:211-214.  
1940 A hybrid between *Zonotrichia coronata* and *Zonotrichia leucophrys*. *Condor*, 42:45-48. 2 figs.  
1941 Speciation in the avian genus *Junco*. *Univ. California Publ. Zool.*, 44:173-434. 33 figs.  
1949 Some concepts of hybridization and intergradation in wild populations of birds. *Auk*, 66:338-342.
- MONSON, G. AND PHILLIPS, A. R.  
1941 Bird records from southern and western Arizona. *Condor*, 43:108-112.
- MOORE, R. T.  
1916 Another hybrid warbler from northern New Jersey. *Auk*, 33:202-203.
- MORSS, N.  
1926 Mendelian inheritance in hybrid warblers. *Amer. Nat.*, 60:384-387.
- NEWTON, A.  
\*1860 On some hybrid ducks. *Proc. Zool. Soc. London*, 1860:336.
- NICHOLS, J. T.  
1908 Lawrence's and Brewster's Warblers and Mendelian inheritance. *Auk*, 25:86.
- OLSEN, R. E.  
1935 Records of rare Michigan birds, 1934. *Auk*, 52:100-101.
- OSGOOD, W. H.  
1907 *Helminthophila lawrencei* near the District of Columbia. *Auk*, 24:342-343.
- PACKARD, F. M.  
1945 Possible intergrades between the Myrtle and Audubon's Warbler. *Auk*, 62:623.
- PARKES, K. C.  
1949 Brewster's Warbler breeding in Yates County, New York. *Wilson Bull.*, 61:48-49.  
1951 The genetics of the Golden-winged  $\times$  Blue-winged Warbler complex. *Wilson Bull.*, 63:5-15.
- PECK, M. E.  
1911 A hybrid quail. *Condor*, 13:149-151, 1 photo.
- PETERS, H. S.  
1940 Young Great White Heron and Wurdemann's Heron in the same nest. *Auk*, 57:105.
- PITELKA, F. A.  
1938 Brewster's Warbler in the Chicago region. *Auk*, 55:540-542.  
1939 Hybrid *Vermivora*e in the Chicago region. *Auk*, 56:340.
- POOLE, E. L.  
1929 Ducks and other water birds on the Reading, Pa., reservoir. *Auk*, 46:534-536.
- RANSOM, W. H.  
1927 Rare hybrid goose taken in Washington state. *Condor*, 29:170.
- RHOADS, S. N.  
1892 Hybridism exemplified in the genus *Colaptes*. *Science*, 20:325-327.

RICHARDSON, W.

- 1928 *Vermivora chrysoptera* mated with *Vermivora pinus*. *Auk*, 45:46-48.

RICHMOND, C. W.

- 1895 *Helminthophila leucobronchialis* in Maryland. *Auk*, 12:307.

RIDGWAY, R.

- 1872 On the occurrence of a near relative of *Aegiothus flavirostris*, at Waltham, Massachusetts. *Amer. Nat.*, 6:433-434.
- 1876 Notes on the genus *Helminthophaga*. *Ibis*, 1876:166-171.
- 1880 Note on *Helminthophaga cincinnatiensis*. Langdon. *Bull. Nutt. Orn. Club*, 5:237-238.
- 1882 On the generic name *Helminthophaga*. *Bull. Nutt. Orn. Club*, 7:53-54.
- 1885 Some emended names of North American birds. *Proc. U. S. Natl. Mus.*, 8:354-356.
- 1885 *Helminthophila leucobronchialis*. *Auk*, 2:359-363.
- 1887 On a probable hybrid between *Dryobates nuttallii* (Gamb.) and *D. pubescens gairdnerii* (Aud.). *Proc. U. S. Natl. Mus.*, (1886), 9:521-522.
- 1902 The birds of North and Middle America, part II, *U. S. Natl. Mus. Bull.*, 50:xx + 834, 22 pls.
- 1904 The birds of North and Middle America, part III, *U. S. Natl. Mus. Bull.*, 50:xx + 801, 18 pls.
- 1909 Hybridism and generic characters in the Trochilidae. *Auk*, 26:440-442.

ROLAND, C.

- 1928 Lawrence's Warbler near Norristown, Pennsylvania. *Auk*, 45:510.

ROWAN, W.

- 1926 Comments on two hybrid grouse and on the occurrence of *Tympanuchus americanus americanus* in the province of Alberta. *Auk*, 43:333-336, 2 pls.

SAGE, J. H.

- 1889 The interbreeding of *Helminthophila pinus* and *H. chrysoptera*. *Auk*, 6:279.

SEIBERT, H. C.

- 1941 Brewster's Warbler in Maryland. *Auk*, 58:410.

SENNETT, G. B.

- 1887 Description of two new subspecies of titmice from Texas. *Auk*, 4:28-30.

SHUFELDT, R. W.

- 1893 Notes on the trunk skeleton of a hybrid grouse. *Auk*, 10:281-285.

SIBLEY, C. G.

- 1949 The incidence of hybrids in migrant Blue and Snow Geese in Kansas. *Condor*, 51:274.

SIBLEY, C. L.

- 1938 Hybrids of and with North American Anatidae. *C. R. 9me Congr. Orn. Inter. Rouen*, 1938, pp. 327-335.

STONE, W.

- 1893 A hybrid sparrow (*Zonotrichia albicollis* + *Junco hyemalis*). *Auk*, 10:213-214, 1 pl.
- 1903 A hybrid duck, *Anas boschas* × *Nettion carolinensis*. *Auk*, 20:209-210.

STRONG, R. M.

- 1939-1946 A bibliography of birds. *Field Mus. Nat. Hist., Zool. Ser.*, 25 (parts 1-3) part 1:1-464, 1939; part 2:469-937, 1939; part 3:1-528, 1946.

## SUCHETET, A.

- 1897 Des hybrides a l'etat Sauvage. Tome I. classe des oiseaux. Paris, J. B. Bailliere and Fils. pp. CLII + 1001.

## SUTTON, G. M.

- 1928 The birds of Pymatuning Swamp and Conneaut Lake, Crawford County, Pennsylvania. *Ann. Carneg. Mus.*, 18:19-239.  
1931 The Blue Goose and Lesser Snow Goose on Southampton Island, Hudson Bay. *Auk*, 48:335-364, map, 3 pls.  
1931 Notes on birds observed along the west coast of Hudson Bay. *Condor*, 33:154-159.  
1938 Oddly plumaged orioles from western Oklahoma. *Auk*, 55:1-6, 1 pl.  
1942 Winter range of Oklahoma's hybrid orioles. *Condor*, 44:79.  
1942 Is Sutton's Warbler a valid species? *Cardinal*, 5:151-154, 2 pls.

## SWAIN, J. R.

- 1933 Another hybrid between the Rose-breasted and Rocky Mountain Black-headed Grosbeaks. *Nebraska Bird Review*, 1:63.

## SWARTH, H. S.

- 1905 Summer birds of the Papago Indian Reservation and of the Santa Rita Mountains, Arizona. *Condor*, 7:22-28, 47-50, 77-81.  
1915 An apparent hybrid between species of the genera *Spatula* and *Querquedula*. *Condor*, 17:115-118, 1 photo.

## SWENK, M. H.

- 1930 The Rose-breasted and Black-headed Grosbeaks hybridize. *Wilson Bull.*, 42:289.  
1936 A study of the distribution, migration, and hybridism of the Rose-breasted and Rocky Mountain Black-headed Grosbeaks in the Missouri Valley Region. *Nebraska Bird Review*, 4:27-40, 2 maps.

## TAVERNER, P. A.

- 1932 A new subspecies of Willow Ptarmigan and a new hybrid Grouse. *Natl. Mus. Canada, Annual Rept. for 1930*, pp. 87-89, 1 pl.  
1933 A study of Kumlien's Gull (*Larus kumlieni* Brewster). *Canadian Field-Naturalist*, 47:88-96.  
1934 Flicker hybrids. *Condor*, 36:34-35.

## TAYLOR, W. P.

- 1909 An instance of hybridization in hummingbirds. with remarks on the weight of generic characters in the Trochilidae. *Auk*, 26:291-293.  
1911 An apparent hybrid in the genus *Dendroica*. *Univ. California Publ. Zool.*, 7:173-177.

## THAYER, J. E. AND BANGS, O.

- 1907 Another hybrid hummingbird—*Selasphorus rufus* + *Atthis calliope*—from California. *Auk*, 24:312-313.

## THOMPSON, E. E.

- 1894 Hybrid *Pinicola enucleator* + *Carpodacus purpureus*. *Auk*, 11:1-3, 1 pl.

## THURBER, E. C.

- 1886 *Helminthophila leucobranchialis* in New Jersey. *Auk*, 3:411.

## TORDOFF, H. B.

- 1950 Some Michigan bird records. *Jack-Pine Warbler*, 28(3):78-82.  
1950 A hybrid tanager from Minnesota. *Wilson Bull.*, 62:3-4, 1 pl.

TOWNSEND, C. H.

- 1883 Description of a hybrid sparrow (*Zonotrichia albicollis* × *Juuco hiemalis*).  
*Bull. Nutt. Orn. Club*, 8:78-80.

TROTTER, S.

- 1878 Description of a hybrid (*Hirundo horreori-luuiifrons*) between two North  
American swallows. *Bull. Nutt. Orn. Club.*, 3:135-136.  
1887 The significance of certain phases in the genus *Helminthophila*. *Auk*, 4:307-  
310.

TUCKER, M. M. B.

- 1928 Lawrence's Warbler in New York. *Auk*, 45:102.

VAN ROSSEM, A. J.

- 1931 Descriptions of new birds from the mountains of Southern Nevada. *Trans.*  
*San Diego Soc. Nat. Hist.*, 6:325-332.

VAN TYNE, J. AND SUTTON, G. M.

- 1937 The birds of Brewster County, Texas. *Univ. Michigan Mus. Zool., Misc. Publ.*,  
37:1-119, frontispiece, 5 pls., 1 map.

WALKINSHAW, L. H.

- 1931 Brewster's Warbler in Calhoun County, Michigan. *Auk*, 48:613.

WATTERSON, W. H.

- 1928 Brewster's Warbler in Ohio. *Auk*, 45:511.

WHITE, F. B.

- 1936 Brewster's Warbler (*Vermivora leucobronchialis*) in New Hampshire. *Auk*,  
53:450.

WOOD, N. A.

- 1923 A preliminary survey of the bird life of North Dakota. *Univ. Michigan Mus.*  
*Zool., Misc. Publ.*, 10:1-96, 6 pls.

MUSEUM OF NATURAL HISTORY, UNIVERSITY OF KANSAS, LAWRENCE, JUNE 5,  
1951